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## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-10 (Canceled).

11. (Currently Amended) A gas turbine having a plurality of chambers, each one of said chambers comprising:

at least one combustion reaction zone receiving air from a compressor and fuel from a fuel distributor;

said fuel distributor having a fuel trim orifice and a fuel trim valve, said fuel trim valve for said each one of said chambers being individually adjustable to trim the flow of fuel to the chamber;

a pressure sensor detecting a dynamic gas pressure in the chamber;

a <u>variation</u> fuel/air ratio-sensor for detecting the variation in fuel/air ratio from said plurality of chambers; and

a computer controller coupled to said fuel trim <u>valve</u> valves-and said sensors, and programmed for operatively adjusting the fuel trim valve to optimize the dynamic gas pressure detected by the pressure sensor and the variation in fuel/air ratio detected by the <u>variation</u> fuel/air ratio sensor, sensor and for further adjusting the fuel trim valve

for each one of said chambers to maintain said variation in fuel/air ratio at a predetermined level.

- 12. (Currently Amended) A gas turbine as claimed in claim 11, said <u>variation</u> fuel/air ratio sensor comprising a plurality of thermocouples for sensing the chamber temperature of each one of said plurality of chambers.
- 13. (Currently Amended) A gas turbine having a plurality of chambers, each one of said chambers comprising:

at least one combustion reaction zone receiving air from a compressor and fuel from a fuel distributor;

said fuel distributor having a fuel trim orifice and a fuel trim valve, said fuel trim valve for said each one of said chambers being individually adjustable to trim the flow of fuel to the chamber;

a pressure sensor detecting a dynamic gas pressure in the chamber;

a <u>variation</u> fuel/air ratio sensor for detecting the variation in fuel/air ratio from said plurality of chambers; and

a computer controller coupled to said fuel trim <u>valve</u> valves and said sensors, and programmed for operatively adjusting the fuel trim valve to optimize the dynamic gas pressure detected by the pressure sensor and the variation in fuel/air ratio detected

by the fuel/air-variation sensor, -sensor and for further adjusting the fuel trim valve for each one of said chambers to maintain NO<sub>x</sub> emissions at a predetermined level.

- 14. (Currently Amended) A gas turbine as claimed in claim 13, said <u>variation</u> fuel/air ratio-sensor comprising a plurality of thermocouples for sensing the chamber temperature of each one of said plurality of chambers.
- 15. (Currently Amended) A control system for a gas turbine having multiple combustors, combustors and associated multiple fuel lines and valves to at least one of said multiple combustors, said control system comprising:

at least one pressure sensor for detecting dynamic gas pressure in said multiple combustors;

at least one <u>variation</u> fuel/air ratio-sensor for detecting variation in fuel/air ratio between said multiple combustors;

a computer controller coupled to said multiple fuel valves and said sensors, and programmed for operatively adjusting said multiple fuel valves to enhance the dynamic gas pressure detected by said at least one pressure sensor and to enhance the variation in fuel/air ratio detected by said at least one variation fuel/air ratio sensor, sensor and for further adjusting said multiple fuel valves to maintain the variation in fuel/air ratio at a predetermined level.

- 16. (Currently Amended) A control system as claimed in claim 15, said at least one <u>variation</u> fuel/air ratio sensor comprising at least one thermocouple for sensing chamber temperature of at least one of said multiple combustors.
- 17. (Currently Amended) A control system for a gas turbine having multiple combustors, combustors and associated multiple fuel lines and valves to at least one of said multiple combustors, said control system comprising:

at least one pressure sensor for detecting dynamic gas pressure in said multiple combustors;

at least one <u>variation</u> fuel/air ratio-sensor for detecting variation in fuel/air ratio between said multiple combustors;

a computer controller coupled to said multiple fuel valves and said sensors, and programmed for operatively adjusting said multiple fuel valves to enhance the dynamic gas pressure detected by said at least one pressure sensor and to enhance the variation in fuel/air ratio detected by said at least one fuel/air ratio variation sensor, sensor and for further adjusting said multiple fuel valves to maintain NO<sub>x</sub> emissions at a predetermined level.

- 18. (Currently Amended) A control system as claimed in claim 17, said at least one <u>variation</u> fuel/air ratio-sensor comprising at least one thermocouple for sensing chamber temperature of at least one of said multiple combustors.
- 19. (Currently Amended) A control system for a gas turbine having multiple combustors, combustors and associated multiple fuel lines and valves to at least one of said multiple combustors, said control system comprising:

pressure sensor means for detecting dynamic gas pressure in said multiple combustors;

fuel/air ratio sensor means for detecting variation in fuel/air ratio between said multiple combustors;

computer controller means coupled to said multiple fuel valves, said pressure sensor means and said <u>detecting fuel/air ratio-means</u>, <u>and programmed</u> for operatively adjusting said multiple fuel valves to enhance the dynamic gas pressure detected by said pressure sensor means and <del>to enhance-the variation in fuel/air ratio detected by said fuel/air ratio sensor detecting means, means and for further adjusting said multiple fuel valves to maintain the variation in fuel/air ratio at a predetermined level.</del>

- 20. (Currently Amended) A control system as claimed in claim 19, said fuel/air-ratio sensordetecting means comprising at least one thermocouple for sensing chamber temperature of at least one of said multiple combustors.
- 21. (Currently Amended) A control system for a gas turbine having multiple combustors, combustors and associated multiple fuel lines and valves to at least one of said multiple combustors, said control system comprising:

pressure sensor means for detecting dynamic gas pressure in said multiple combustors;

fuel/air ratio sensor-means for detecting variation in fuel/air ratio between said multiple combustors;

computer controller means coupled to said multiple fuel valves, said pressure sensor means and said <u>detecting fuel/air ratio-means, and programmed</u> for operatively adjusting said multiple fuel valves to enhance the dynamic gas pressure detected by said pressure sensor means and to enhance the variation in fuel/air ratio detected by said <u>fuel/air ratio sensor detecting means</u>, means and for further adjusting said multiple fuel valves to maintain NO<sub>x</sub> emissions at a predetermined level.

22. (Currently Amended) A control system as claimed in claim 21, said fuel/air ratio sensor detecting means comprising at least one thermocouple for sensing chamber temperature of at least one of said multiple combustors.